WHAT IS CLAIMED IS:

1. A polymer alloy comprising:

from about 90 to 20 weight % of a brittle polymer with a weight average molecular weight greater than 180,000, and comprising:

(i) from 80 to 45 weight % of one or more C_{8-12} vinyl aromatic monomers;

(ii) from 20 to 55 weight % of one or more C_{1-6} alkyl esters of C_{3-6} ethylenically unsaturated carboxylic acids; and

(iii) from 0 to 5 weight % of one or more C_{3-6} ethylenically unsaturated carboxylic acids or anhydrides;

from about 0 to about 60 weight % of a tapered, linear or radial di- or tri- block rubbery polymer comprising:

(i) from 30 to 45 weight % of one or more C_{8-12} vinyl aromatic monomers; and

(ii) from 70 to 55 weight % of one or more C_{4-6} conjugated diolefins;

from about 0 to about 80 weight % of a tapered, linear or radial di- or tri-block ductile polymer comprising:

(i) from 65 to 80 weight % of one or more C_{8-12} vinyl aromatic monomers; and

(ii) from 35 to 20 weight % of one or more C_{4-6} conjugated diolefins; and

greater than 0.4 weight % of a plasticizer based on the total weight of the polymer alloy.

2. The polymer alloy of claim 1 comprising:

from about 80 to 20 weight % of said brittle polymer with a weight average molecular weight greater than 220,000;

from about 0 to about 3 weight % of said tapered, linear or radial di- or tri-block rubbery polymer;

from about 20 to about 80 weight % of said tapered, linear or radial di- or tri-block ductile polymer; and

from about 0.5 to about 3.0 weight % of said plasticizer.

3. The polymer alloy of claim 2 comprising:

from about 70 to about 40 weight % of said brittle polymer with a weight average molecular weight ranging between about 270,000 to about 300,000;

from about 0 to about 3 weight % of said tapered linear or radial di- or tri- block rubbery polymer;

from about 30 to about 60 weight % of said tapered, linear or radial di- or tri- block ductile polymer; and

from about 1.0 to about 2.0 weight % of said plasticizer.

4. The polymer alloy of claim 3 comprising:

about 50 to 55 weight % of said brittle polymer with a weight average molecular weight of about 280,000;

about 0 weight % of said tapered linear or radial di- or tri- block rubbery polymer;

about 50 to 45 weight % of said tapered, linear or radial di- or tri- block ductile polymer; and

about 1.5 weight % of said plasticizer.

5. The polymer alloy of claim 1 comprising:

from about 80 to 20 weight % of said brittle polymer with a weight average molecular weight greater than 180,000;

from about 5 to about 60 weight % of said tapered linear or radial di- or tri- block rubbery polymer;

from about 0 to about 60 weight % of said tapered, linear or radial di- or tri- block ductile polymer; and

greater than 0.4 weight % of said plasticizer.

6. The polymer alloy of claim 5 comprising:

from about 70 to 50 weight % of said brittle polymer with a weight average molecular weight ranging between about 190,000 and 300,000;

from about 5 to about 20 weight % of said tapered linear or radial di- or tri-block rubbery polymer;

from about 20 to about 40 weight % of said tapered linear or radial di- or tri- block ductile polymer; and

from about 0.5 to about 3.0 weight % of said plasticizer.

7. The polymer alloy of claim 6 comprising:

from about 65 to about 55 weight % of said brittle polymer with a weight average molecular weight ranging between 195,000 and 270,000;

from about 8 to about 12 weight % of said tapered linear or radial di- or tri- block rubbery polymer;

from about 25 to about 35 weight % of said tapered linear or radial di- or tri- block ductile polymer; and

from about 0.7 to about 1.5 weight % of said plasticizer.

8. The polymer alloy of claim 1 wherein said weight average molecular weight of said brittle polymer is about 400,000.

9. The polymer alloy of claim 1 wherein in said brittle polymer said C_{8-12} vinyl aromatic monomer is selected from the group consisting of styrene, α-methyl styrene, p-methyl styrene and t-butyl styrene.

10. The polymer alloy of claim 1 wherein in said brittle polymer said C_{1-6} alkyl esters of C_{3-6} ethylenically unsaturated carboxylic acid is selected from the group consisting of acrylic ester, methyl methacrylate, methyl acrylate, ethyl acrylate, ethyl methacrylate, butyl acrylate, and butyl methacrylate.

11. The polymer alloy of claim 1 wherein in said ductile polymer said one or more C_{8-12} vinyl aromatic monomers is selected from the group consisting of styrene, α-methyl styrene, p-methyl styrene and t-butyl styrene, and said one or more C_{4-6} conjugated diolefins is selected from the group consisting of butadiene and isoprene.

12. The polymer alloy of claim 1 wherein said brittle polymer is a copolymer of a styrene and methyl methacrylate.

13. The polymer alloy of claim 12 wherein said ductile polymer is a styrene butadiene block copolymer present in an amount ranging from about 30 to about 60 weight percent based on the total weight of the polymer alloy.

14. The polymer alloy of claim 13 wherein said

styrene and methyl methacrylate copolymer of said brittle polymer is present in an amount ranging from about 50 to about 55 weight percent and said styrene butadiene block copolymer of said ductile polymer is present in said polymer alloy in an amount ranging from about 45 to about 50 weight percent, and wherein said rubbery polymer is present in an amount of 0 weight percent, and wherein said plasticizer is present in an amount of about 1.5 weight percent.

15. The polymer alloy of claim 13 wherein said butadiene in said styrene butadiene block copolymer of said ductile polymer is present in an amount ranging from about 20 to about 35 weight percent and wherein the amount of said methyl methylacrylate in said styrene and methyl methyacrylate copolymer is present in an amount ranging from about 20 to about 35 weight percent.

16. The polymer alloy of claim 1 wherein said plasticizer is selected from the group consisting of mineral oil, vegetable oil, animal oil, synthetic oil, silicone oil, and fluorinated oil.

17. The polymer alloy of claim 16 wherein said plasticizer is mineral oil.

18. The polymer alloy of claim 1 wherein said plasticizer ranges in the amount of about 1.0 to about 2.0 weight % based on the total weight of the polymer alloy.

19. The polymer alloy of claim 1 wherein said plasticizer is mixed in and resides in said brittle polymer prior to forming said polymer alloy.

20. The polymer alloy of claim 2 wherein the indices of refraction of the different phases of the

polymer alloy are matched within a + or - 0.005 with a haze less than 5%.

21. The polymer alloy of claim 2 wherein the indices of refraction of the different phases of the polymer alloy are matched within + or - 0.002 with a haze less than 3%.

22. The polymer alloy of claim 2 wherein the indices of refraction of the different phases of the polymer alloy are matched within + or - 0.002 with a haze less than 1.5%.

23. The polymer alloy of claim 5 wherein the indices of refraction of the different phases of the polymer alloy are matched within + or - 0.005 with a haze less than 10%.

24. The polymer alloy of claim 5 wherein the indices of refraction of the different phases of the polymer alloy are matched within + or - 0.002 with a haze between 1% and 4%.

25. The polymer alloy of claim 1 having a Notched IZOD impact strength ranging between about 1.0 and 6.0 ft-lb./in. measured according to ASTM D-256.

26. The polymer alloy of claim 25 having a Notched IZOD impact strength ranging between about 2.0 and 4.5 ft-lb./in. measured according to ASTM D-256.

27. An article made from the polymer alloy of claim 1.

28. A process for preparing a polymer alloy of claim 1 the steps comprising:

blending said plasticizer with said brittle polymer, and

forming said polymer alloy by adding said brittle polymer with a group of polymers selected from the group consisting of said rubbery polymer,

said ductile polymer, and said rubbery polymer with said ductile polymer,

wherein said plasticizer resides in said brittle polymer.